



## Subject card

Subject name and code	Road construction and maintenance, PG_00044343						
Field of study	Civil Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2022/2023		
Education level	second-cycle studies	Subject group		Optional subject group			
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Bohdan Dołżycki					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	0.0	0.0	10.0	0.0	20
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	20		5.0		25.0	50
Subject objectives	The course presents principles of road construction and maintenance, in terms of technical and legal requirements.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W07] has expanded knowledge of theory of road and airport pavements, pavement maintenance, advanced methods of material testing and construction technologies	At the conclusion of the course, student should be familiar with the principles of road construction and maintenance, including modern construction and diagnostic technologies.			[SW1] Assessment of factual knowledge		
	[K7_U08] Is able to evaluate technical condition of a road, to design its pavement and choose proper construction technology using mechanistic methods and material investigations	At the conclusion of the course, student should be familiar with the methods of road condition assessment and proper maintenance techniques.			[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information		
Subject contents	Lecture contents: Formal regulations regarding to road construction process, order of construction process, road construction technologies, road diagnostic and maintenance.  Project contents: Designing of the section of the road including drainage, sighting distance and structural overlay.						
Prerequisites and co-requisites	Prerequisites (basic):  1. Course - Bridge Construction (BND012)  2. Course - Railway Construction II (BND013)  3. Course - Road and Motorway Construction II (BND042)						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Practical design exercise	100.0%			50.0%		
	Colloquium at the end of the term	60.0%			50.0%		

Recommended reading	Basic literature	<ol style="list-style-type: none"> <li>1. Węzły drogowe i autostradowe. Praca pod red. Prof. R. Krystka. WKŁ Warszawa, 2008.</li> <li>2. Gaca S., Suchorzewski W., Tracz M.: Inżynieria Ruchu drogowego. Teoria i praktyka. WKŁ Warszawa 2009</li> <li>3. Głazewski M., Nowocień., Piechowicz K, Roboty ziemne i rekultywacyjne w budownictwie komunikacyjnym, WKŁ, Warszawa 2011</li> <li>4. Piłat J., Radziszewski P.: Nawierzchnie asfaltowe, WKŁ, 2004.</li> </ol>
	Supplementary literature	<ol style="list-style-type: none"> <li>1. Warunki techniczne jakim powinny odpowiadać drogi publiczne i ich usytuowanie. Dziennik Ustaw, Warszawa 1999</li> <li>2. Katalog typowych konstrukcji nawierzchni podatnych i półsztywnych. GDDP, Warszawa, 1997</li> <li>3. Edel R. Odwodnienie dróg, WKŁ, Warszawa 2009</li> <li>4. Wilun Z., Zarys geotechniki, WKŁ, Warszawa 2013</li> </ol>
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	